

*Some new Indo-Malayan Orchids.*—By G. KING and R. PANTLING.

In two papers recently read before the Society we gave descriptions of about sixty new species of *Orchidaceæ* from the Sikkim-Himalaya. In the present paper we offer descriptions of forty-six species from other parts of the Indian Empire which we believe to be hitherto undescribed. In order to assure ourselves of their novelty we sent either a specimen or a careful drawing of each of them to the Royal Herbarium at Kew for comparison. And to Mr. W. T. Thiselton Dyer, F.R.S., C.M.G., Director of that Institution, our thanks are due for his courtesy in having the comparisons most promptly and carefully made by Mr. R. A. Rolfe of the Royal Herbarium, who for many years has made Orchids a special study.

**MALAXIDEÆ.**

*OBERONIA GAMMIEL*, n. spec. *Stems* very short, not tufted. *Leaves* ensiform, obliquely acuminate, slightly falcate. *Inflorescence* slender, decurved from the middle, longer than the leaves; the peduncle winged in its lower half, ebracteate, or with very few bracts near the raceme; the raceme sparsely-flowered, its rachis more slender than the peduncle; floral bract equalling the stalked ovary, oblong, blunt, erose. *Flowers* .05 in. long, brown, with pale margins. *Sepals* ovate, acute, entire. *Petals* ovate-lanceolate, erose, reflexed and lying on the ovary like the sepals. *Lip* slightly exceeding the sepals in length, broadly ovate in general outline, deeply concave, 3-lobed; lateral lobes long, narrow, coarsely serrate, their apices acute and pointing forwards; the terminal lobe rather small, transversely oblong, sub-entire; its apex truncate, divided into two short incurved sub-quadrate lobules by a sub-quadrate sinus. *Clinandrium* much wider than the anther. *Pollinia* elongate, obovoid.

In the Sunderbans; Lower Bengal; on trees; G. A. Gammie and R. L. Heinig, No. 92. At Rangamatia in the Chittagong Hill Tracts; Gamble, No. 6833; in flower from December to March.

This species is allied to *O. iridifolia*, Lindl., and to *O. recurva*, Lindl. It has, however, a much fewer-flowered raceme than *O. iridifolia*; the lip of this is concave, more distinctly three-lobed than in *O. iridifolia*, while the lateral lobes in this are serrate, not pectinate, and the terminal lobe is sub-quadrate with (except for the apical sinus) almost entire edges. This is a much larger plant than *O. recurva*, from which it also differs in the lip, which in that species is flat with large rounded crenate side lobes; while the terminal lobe is rather deeply divided into two oblong blunt lobules.

*OBERONIA SUBNAVICULARIS*, n. spec. *Stems* very short, tufted. *Leaves* unequal, ensiform, obliquely acuminate, length .75 to 6 in., breadth .25 to .5 in. *Inflorescence* scarcely so long as the leaves; its peduncle erect, terete, ebracteate; raceme much longer than the peduncle, slightly decurved, densely flowered, thick at the base and tapering to the apex; floral bract small, only half encircling the thick ovary, lanceolate, erose. *Flowers* about .05 in. long. *Sepals* broadly ovate, blunt, entire, reflexed on the ovary. *Petals* narrowly oblong, truncate, entire, also reflexed. *Lip* about as long as the sepals, broad, very concave from base to apex, entire, the edges coarsely retroserrate; the apex blunt, emarginate and with a broad tooth in the sinus; upper surface with a large depressed cordate nectary near the base. *Lip* of the *anther* acute.

Perak; Scortechini, No. 1202; in flower in August.

In externals this resembles *O. iridifolia*, Lindl.; but this differs in having a terete wingless peduncle, a small floral bract which only half encircles the ovary, linear-oblong blunt petals, and a very concave (not lobed) retroserrate lip with a large nectary near its base. The late Father Scortechini collected only three specimens of it, and of one of these he made a drawing which is now in the Calcutta Herbarium.

*OBERONIA RITAI*, n. spec. *Stems* very short, tufted. *Leaves* linear-ensiform, acuminate, 1 to 5 in. long and .2 to .35 in. broad. *Inflorescence* decurved from about the middle, rather longer than the leaves; the peduncle short, terete, bracteate; the *raceme* densely flowered; floral bract lanceolate, acuminate, erose, longer than the stalked ovary. *Flowers* .06 in. across, pale-green, sub-verticillate. *Sepals* and *petals* sub-equal, ovate, blunt, spreading, the latter with sub-crenate margins. *Lip* slightly longer than the sepals, and broader at the apex, 3-lobed, the basal lobes large, erect or slightly incurved, rounded or pointed, their bases connected by a deep semi-lunar nectary; terminal lobe large, ob-reniform, the apical sinus broad and with a broad triangular process at its apex. *Capsule* ovoid, ribbed, pedicelled.

Khasia Hills; at Jowai; elevat. 2000 to 3000 feet; S. E. Rita; Mann, G. A. Gammie; in flower in August.

A species belonging to the group to which belong *O. myriantha*, *O. recurva*, *O. demissa* and *O. micrantha*; but distinguished from all these by the large erect entire basal lobes of the lip and by its broad obreniform terminal lobe. We have named it after Mr. S. E. Rita of the Assam Commission, to whom we are indebted for much generous help in the collection of the orchids of the Khasia Hills.

*OBERONIA INTERMEDIA*, n. spec. *Caulescent*; stems 1 to 3.5 in. long, tufted. *Leaves* equitant, acute, subfalcate, 1 to 2.25 in. long

and .25 to .35 in. broad. *Inflorescence* slender, decurved, about 4.5 in. long; the peduncle short and ebracteate, adnate to the uppermost and reduced leaf; the raceme many-flowered. *Flowers* about .05 in. long, verticillate; floral bract lanceolate, shorter than the ovary. *Sepals* subequal, ovate, acute, spreading. *Petals* linear-oblong, acute, spreading. *Lip* larger than the sepals and petals, broadly oblong in general outline, 3-lobed; the basal lobes rounded; apical lobe sub-rotund, somewhat contracted at the base, the apex broad and erose, otherwise entire.

Perak: Scortechini No. 1516 (with drawing).

A species allied to *O. demissa*, Lindl. and to *O. micrantha*, King and Pantling; but differing from both in having linear-oblong acute petals, and also in the shape of the basal lobes of the lip which in *O. demissa* are blunt and erose, in *O. micrantha* broad rounded and subentire, while in this they are oblong and entire. The apical lobe of the lip of this is also slightly different from that of the other two, being in outline more orbicular, and erose only at the apex. The leaves of this are moreover longer than those of *O. micrantha*, while the raceme differs from that of *O. demissa* in not being truncate.

OBERONIA PROUDLOCKII, n. spec. Whole plant six inches in height, or less. *Stems* very short, tufted. *Leaves* ensiform, acute, not falcate or only slightly so, fleshy but with thin edges, 1 to 2.5 in. long and .25 to .5 in. broad. *Inflorescence* about twice as long as the leaves, erect below but slightly decurved above; the peduncle about as long as the spike, fleshy, 2-winged, ebracteate; rachis of the spike thick, fleshy, terete. *Flowers* numerous, reddish-brown, .05 in. long, sunk singly in pits in the rachis, the perianth adpressed to its surface; floral bract covering the flower-buds, longer than the sub-sessile ovary, ovate-rotund, fleshy in the middle but with broad membranous lacinate margins. *Sepals* reflexed, ovate, acute, entire. *Petals* ovate-lanceolate, entire, reflexed on the ovary like the sepals. *Lip* broader but hardly longer than the sepals, convex, sub-quadrate; the base truncate and with an obscure rounded auricle at each extremity, slightly narrowed to the broad sub-truncate apex, the margins slightly and obscurely erose but not lobed; nectary small, elliptic-rotund, deep, situated at the base just under the column.

Nilgiri Hills; near Gudalur, Mr. R. L. Proudlock; in flower in September.

A species allied to *O. pachyrachis*, Reichb. fil., and *O. orbicularis*, Hook. fil., and still more closely to the Sikhim species *O. pachyphylla*, K. & P.; but differing from them all by its reflexed sepals and differently shaped lip.

*OBERONIA CAUDATA*, n. spec. Caulescent; stems about 1·5 in. long, tufted. Leaves four or five, distant, linear-ensiform, acuminate, falcate, ·75 to 2 in. long, and ·15 in. broad. Inflorescence adnate to the uppermost and reduced leaf, much decurved, about as long as the longest leaf; its peduncle short, ebracteate; the raceme laxly-flowered. Flowers solitary, about ·05 in. long; floral bract ovate, entire, longer than the stalked ovary. Sepals subequal, ovate-oblong, acute, pale red, slightly reflexed. Petals linear-lanceolate, acuminate, reflexed, paler and more hyaline than the sepals. Lip much longer than the sepals or petals, 3-lobed; basal lobes ovate, acuminate, spreading; terminal lobe narrow, deeply divided into two caudate acuminate wavy divergent lobules.

Perak: Scortechini No. 315b.

A species allied to *O. caulescens*, Lindl., but differing by the adnate peduncle, the much narrower petals which are moreover acuminate, and also by the lip which in this has narrower basal lobes which also are acuminate. The apical lobules of this are moreover longer than in the lip of *O. caulescens*, and they are undulate.

*OBERONIA ROLFEANA*, n. spec. Stems about an inch long, tufted. Leaves ensiform, acute, falcate, rather thin, ·75 to 1 in. long and about ·25 in. broad. Inflorescence three or four times as long as the leaves, slender, decurved, puberulous; the peduncle shorter than the leaves, bracteate; raceme rather sparsely flowered for the genus; floral bract oblong, blunt, with erose hyaline edges, shorter than the glandular-hairy stalked ovary. Flowers ·05 in. long, orange-coloured. Sepals subequal, ovate, obtuse, sub-coriaceous, entire, spreading. Petals linear, sub-acute, entire, spreading. Lip longer than the sepals and petals, broad and concave towards the base; basal lobes rounded, erect, entire, terminal lobe narrow, shortly bilobed at the recurved apex, its edges entire.

Perak: Scortechini No. 2193.

A species collected only once by the late Father Scortechini who made a drawing of it. The species is apt to be confused with *O. ciliolata*, Hook. fil., which it much resembles in general appearance, and in having a glandular-pubescent inflorescence; but it differs from that species in its lip, the terminal lobe of which in *O. ciliolata* is much broader than long and has fimbriate edges.

*OBERONIA BEETOLDI*, n. spec. Stems very short, tufted. Leaves coriaceous, narrowly lanceolate, acuminate; length ·5 to 1·25 in., breadth ·2 to ·25 in. Peduncle of the inflorescence about as long as the leaves, slender, ebracteate; the spike rather longer than the leaves, many-flowered. Flowers ·05 in. long, in verticels of about 6; floral



bract about as long as the ovary, lanceolate, erose-serrate. *Sepals* elliptic-oblong, sub-acute, entire, revolute. *Petals* lanceolate, coarsely serrate, spreading, the apices slightly incurved. *Lip* longer than the petals, ovate-elliptic, not lobed, the base rounded and entire, the sides with one or two irregular teeth; the apex deeply bifid, the lobules irregularly and coarsely toothed.

Perak; Scortechini No. 1525.

A species closely allied to *O. Prainiana*, King and Pantling, which was collected by Scortechini in Perak, but which has also been found at the base of the Sikkim-Himalaya. The lip of *O. Prainiana*, K. and P., differs from the lip of this in not being bifid, and in being irregularly lobulate-erose from base to apex; the petals also are longer. Named in honour of its discoverer, the late Father Bertold Scortechini.

*MICROSTYLIS ANDAMANICA*, n. spec. *Stem* about 2·5 in. long, covered by 2 or 3 loose sheaths with acute apices. *Leaves* three or four, membranous and plicate, broadly ovate-lanceolate, oblique, acute or shortly acuminate, rather abruptly and obliquely narrowed at the base to the sheathing petiole; length 3 to 5 in., breadth 1·5 to 2 in., petiole about 1 in. long. *Inflorescence* about twice as long as the leaves; the peduncle ribbed, ebracteolate; the raceme rather laxly-flowered; the floral bract lanceolate, acuminate, shorter than the slender stalked ovary, reflexed. *Flowers* dull purple, 4 in. long. *Dorsal sepal* lanceolate, obtuse; the laterals oblong, obliquely acuminate. *Petals* linear, blunt, shorter than the dorsal sepal. *Lip* flat, ovate, tapering to each end; the apex pointed, entire; the base with two rather short falcate acute converging lateral lobes, their tips often touching or overlapping.

South Andaman Island; King's Collectors.

The nearest ally of this is no doubt *M. Wallichii*, Lindl., to which species Sir Joseph Hooker tentatively refers it as a form (Ann. Bot. Gard. Calcutta, Vol. V, Pt. 1, t. 2, fig. E, and Fl. Br. Ind. V, 686). Sir Joseph however expresses the belief that it will turn out to be a distinct species. Ample materials recently received from the Andamans show that this is really the case. The flowers are larger than those of *M. Wallichii*; they are uniformly of a dull purple colour, the apex of the lip being entire and acute, and the basal auricles falcate acute and converging, while both sepals and petals have recurved margins. In *M. Wallichii*, on the other hand, the apex of the lip is blunt and notched; the basal auricles are lanceolate, their inner edges straight and parallel, and their apices not converging.

*LIPARIS PRAZERI*, n. spec. Terrestrial; pseudo-bulb narrowly ovoid, pointed, about one inch long, enveloped by one or two loose scarious sheaths, and bearing near its apex two sub-opposite leaves. *Leaves*

membranous, ovate, acuminate; the base rounded and passing abruptly into the short loose sheath, 7- to 9- nerved; length 3·5 to 5·5 in., breadth 2·25 to 2·75 in. *Inflorescence* much longer than the leaves, slender, striate; *raceme* as long as the ebracteate peduncle, few-flowered; floral bract lanceolate, shorter than the slender pedicelled ovary, reflexed. *Flowers* 4 in. long, pale-green with a shade of yellow, (*fide* collector) their ovaries nearly 5 in. long. *Sepals* lanceolate, reflexed, the dorsal narrower than the lateral pair. *Petals* linear; their margins, like those of the sepals, revolute. Lip deflexed from the very base, flat, broadly obovate, the margins entire, the base with two small rounded calli. *Column* almost straight, not winged at the apex and not dilated at the base.

The nearest ally of this appears to be the North-West Himalayan species *L. rostrata*, Reichb. fil., from which this however differs in having an entire lip with two calli at its base, a more elongated pseudo-bulb and almost sessile leaves. It also resembles *L. deflexa*, Hook. fil., but differs from that in having nearly sessile broader leaves and an entire lip. It belongs to the section *Mollifoliae*.

Upper Burma; at Kendat; Calcutta Botanic Garden Collector; flowering in August; Kurz (without flower) No. 345.

*DENDROBIUM RITAEANUM*, n. spec. *Stems* slender, formed of chains of slender pseudo-bulbs with fibrous remains of old sheaths at the joints, branching; the branches consisting of sessile sub-cylindric pseudo-bulbs about 1·25 in. long and 25 in. thick. *Leaf* solitary, from the apex of the pseudo-bulb, lanceolate-oblong, sub-acute, 2·25 to 3·5 in. long, and 5 in. wide. *Flowers* 5 in. across, solitary on a very short peduncle; floral bract minute, triangular. *Dorsal sepal* ovate-lanceolate; the lateral pair falcate, sub-acute. *Petals* oblong, shorter than the sepals. *Lip* in general outline spathulate; the lateral lobes small, projecting, obliquely obtuse; terminal lobe deeply divided by a blunt apical sinus into two broadly elliptic blunt lobules; the disc between the lateral lobes occupied by a thickened purple area sub-spathulate in shape and having a slightly raised mesial line. *Column* and its foot rather long; mentum short, wide. *Orchidarium* lacinate; lip of anther 2-lobed.

Khasia Hills; elevation 3-4000 feet; collected by Mr. Rita, after whom it has been named.

A species belonging to the Section *Cadetia* and allied to *D. Macraei*, Lindl.; but with pale yellow, instead of white, flowers and with much smaller leaves; also having a very different lip from that species and more slender pseudo-bulbs.

*DENDROBIUM SORDIDUM*, n. spec. *Stems* erect, branching; pseudo-  
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bulbs 2 to 3 in. long, springing from the sides of stem, oblong, slightly sigmoid, wrinkled. *Leaf* solitary from the apex of each pseudo-bulb, narrowly oblong, blunt, entire, 3 to 3·5 in. long and about ·5 to ·75 in. broad. *Flowers* ·75 in. across, solitary from a short minutely bracteate pedicel from the apex of the pseudo-bulb with the leaf. *Sepals* subequal, oblong, sub-acute, the dorsal rather wider. *Petals* narrowly oblong, acute, spreading and slightly reflexed like the sepals. *Lip* longer than the sepals in general outline, oblong-obovate; the side-lobes narrow with acute apices; the terminal lobe large, fleshy, sub-reniform, divided at the apex into two broad lobules separated by a rather wide blunt apical sinus, and the base of each lobule boldly undulate-crenulate; the disc between the side-lobes with two ridges straight at the base but much crisped and curved upwards. *Column* broad, its foot short, both deeply concave. *Clinandrium* dentate; lip of anther erose.

Burma; received at the Botanic Garden, Calcutta, from Mr. Peché, of Moulmain; flowering in June.

The petals and sepals are of a pale yellow colour, flushed with brown outside. The basal half of the lip is pale yellow spotted with brown; the terminal half is deep yellow. This species belongs to the Section *Cadetia* and is nearly allied to *D. Macraei*, Lindl., but differs from that species in having shrunken sub-sigmoidal pseudo-bulbs, and shorter leaves; and in having the mid-lobe of the lip more fleshy and the side lobes acute at the apex, while the face of the column and its foot are deeply concave. The species in the Herbarium is probably confused with *D. Macraei*.

*DENDROBIUM GAMBLEI*, n. spec. *Stems* pendulous, slender, 18 to 24 in. long, with short scarious sheaths at the joints. *Leaves* unknown. *Flowers* ·75 in. across, in pairs from the joints of the leafless stem. *Sepals* and *petals* subequal, lanceolate, acuminate, with reflexed tips; the edges of the petals sub-undulate. *Lip* broadly elliptic when flattened out, not lobed, convolute throughout its entire length, the apex blunt, the edges fimbriate-serrate, the base entire and narrowed into a long claw; the upper surface with a broad central band from base to apex, glabrous and with two grooves in its basal half, densely villous in its apical half. *Column* much broader than its elongated narrow foot, with a laciniate nectary at its lower extremity; mentum elongate, slightly curved, spur-like. Lip of *anther* denticulate.

Dehra Dun: Mr. J. S. Gamble, after whom it is named; collected only once; in flower in July.

The sepals and petals of this species are pale greenish-yellow; the lip is pink except the villous band near its apex which is yellow. The flowers are inodorous. The species belongs to the section *Eudendro-*

bium, and its nearest ally appears to be the Ceylon species *D. macrostachyum*, Lindl.; but in that species the margins of the lip are slightly erose, not deeply fimbriate-serrate as in this; the disc is naked in that, or has only a few scattered hairs; the nectary and anther are entire in *D. macrostachyum*, and the flowers, which are sweet-scented, are in racemes.

**BULBOPHYLLUM DEPRESSUM**, n. spec. *Pseudo-bulbs* obliquely depressed-ovoid, .25 in. long, produced at distances of .2 in. on a filiform rhizome. *Leaf* sessile, broadly ovate, acute, the apex shortly aristate, length .4 in. *Flowers* .2 in. long, solitary, from the bases of the pseudo-bulbs; the ovary slender, about as long as the flower; floral bract ovate, acute, shorter than the sessile ovary. *Sepals* equal, linear-oblong, acuminate, connivent. *Petals* fleshy, less than half as long as the sepals, oblong, slightly ob-lanceolate, acute. *Lip* shorter than the sepals, decurved from the middle; oblong, 3-lobed; the lateral lobes erect, large, broadly oblong, oblique, their edges irregularly dentate-serrate; apical lobe fleshy, blunt, entire, its base much thickened. *Column* very short, only about half the length of the foot, without teeth. *Pollinia* very unequal.

Khasia Hills; in wooded hollows between Jowai and Jhorain; Jaintia Hills; elevation 3000 feet; Pantling No. 627.

The sepals of this interesting little plant are greenish, shading towards the middle into dull purple: the petals and lip are of a uniform dull purple. The species is closely allied to *B. Listeri*, a species described in a former number of this *Journal* (Vol. LXIV, Pt. 2, page 334). But that has a lip with no lobes, and its column has long subulate apical processes; its lip moreover is linear-oblong. It is also allied in habit to *B. Epicrianthes*, Hook. fil., which has however totally different petals, being thread-like and pendulous.

**BULBOPHYLLUM COLLETTII**, n. spec. King and Pantling. *Pseudo-bulbs* oblong, .75 to 1 in. long, situated an inch and a half apart on a wiry rhizome. *Leaf* solitary, elliptic-oblong, blunt, suddenly contracted at the base, sessile; length 1.5 to 2 in., breadth .4 to .6 in. *Scape* not longer than the pseudo-bulb, bearing several sheaths and also 3 or 4 spathaceous bracts just under the 2- to 6-flowered terminal umbel. *Flowers* pale yellow, .3 in. across; floral bract spathaceous, lanceolate, as long as the shortly stalked ovary. *Sepals* sub-equal, linear, acuminate, the dorsal rather shorter. *Petals* lanceolate, finely acuminate, slightly shorter than the dorsal sepal. *Lip* oblong-ovate, fleshy, with a broad shallow triangular groove extending from the base nearly to the apex. *Column* stout, the apex with two long subulate teeth; stigmatic surface large and excavated; the foot as long as the column,



much curved. *Anther* with a triangular concave lip; *pollinia* very unequal, the inner pair very narrow.

Assam; collected by Mr. G. E. Rita and also by Sir Henry Collett, K.C.B., lately commanding the troops in Assam.

A species allied to *B. cauliflorum*, Hook. fil., which is, however, a much larger plant with slightly different sepals and petals. The habit of growth of the two is moreover different, for this species grows in dense masses, whereas *B. cauliflorum* is very straggling, and there is a difference of two months between the seasons of flowering of the two. This is allied also to *B. protractum*, Hook. fil., but has longer and more numerous flowers than that species, and the petals are lanceolate-acuminate; whereas *B. protractum* has narrowly elliptic sub-acute petals and it has also narrower pseudo-bulbs.

**BULBOPHYLLUM OBLANCEOLATUM**, n. spec. *Pseudo-bulbs* none; rhizome stout, densely clothed with coarse fibres and roots. *Leaves* rising singly from the rhizome, ob-lanceolate, sub-acute, tapering in the lower half to the stout plano-convex petiole; length of blade 6 to 8 in., breadth 1.15 to 1.4 in., length of petiole 2 to 2.75 in. *Raceme* from the rhizome near a leaf, with its peduncle as long as or rather shorter than the leaf; the peduncle forming one-third and bearing several lax membranous sheaths each .5 in. long. *Flowers* numerous but not crowded, .3 in. across; floral bract lanceolate, about as long as the stalked ovary. *Sepals* spreading widely, linear-lanceolate, finely acuminate, 1-nerved, the dorsal smaller than the lateral pair and gibbous at the base; the lateral pair subfalcate. *Petals* one-third of the length of the dorsal sepal, linear, acuminate, 1-nerved. *Lip* half as long as the dorsal sepal, curved from the base, 3-lobed; the side-lobes erect, rounded, gradually merging in front with the narrowly oblong sub-acute fleshy apical lobe. *Column* very short; the apical teeth small, sharp, erect.

Perak; on Gunong Batu Pateh, at an elevation of 3400 feet, Wray, No. 980.

The flowers are said by Mr. Wray to be of a pale straw colour. The species is allied to *B. apodum*, Hook. fil., but has a longer raceme and larger flowers than that species; moreover the petals in this are much shorter in proportion to the dorsal sepal, and the lip has very different side lobes.

**BULBOPHYLLUM LINEARIFOLIUM**, n. spec. *Rhizome* .15 in., thickly clothed with short scariosus sheaths; *pseudo-bulbs* none. *Leaves* solitary, about .5 in. apart, linear, slightly curved, acute, narrowed at the base to a petiole 1 to 2 in. long; length of blade 4 to 6 in., breadth .3 to .5 in. *Inflorescence* very slender, erect, subflexuose, about half as long as the

leaves; the peduncle about 1 in. long, clothed with tubular scarious sheaths. *Raceme* 3 or 4 times as long as the peduncle; many-flowered but not crowded. *Flowers* .125 in. long; floral bract lanceolate, acuminate, as long as the slenderly stalked tumid ovary. *Sepals* equal in length, blunt, oblong, spreading, the lateral pair broader than the dorsal and very falcate. *Petals* only half as long as the sepals and much narrower, linear, blunt, 1-nerved, spreading. *Lip* oblong, acute, slightly decurved from the base to the acute apex, without side lobes, the upper surface grooved from the base to near the apex. *Column* very short; its teeth small, blunt.

Perak; Scortechini (without a number).

A species near *B. suavissimum*, Rolfe, but with much smaller flowers and entire not erose petals. The leaves of this differ also from those of that species in being linear and not at all ob-lanceolate.

*BULBOPHYLLUM SHANICAM*, n. spec. *Pseudo-bulbs* turbinate, minutely rugulose, .3 or .4 in. in diam. *Leaves* in pairs, coriaceous, narrowly oblong, blunt, abruptly narrowed at the sessile base; length 1.5 to 2.25 in., breadth .3 to .45 in. *Scape* from the base of the pseudo-bulb, erect, twice as long as the leaves; the peduncle with a few small scattered sheaths; *raceme* lax, about 12-flowered. *Flowers* .15 in. long, white; floral bract broadly lanceolate, acute, shorter than the stalked ovary. Dorsal *sepal* ovate-oblong, blunt; the lateral pair oblong, sub-falcate, obtuse, blunt. *Petals* as long as the sepals but much narrower, lanceolate, obtuse, entire in the upper half and minutely erose in the lower. *Lip* as long as the sepals, oblong, obtuse, without lobes or auricles, pubescent on both surfaces. *Column* stout, with broad shallow wings about the middle, the apical processes bidentate; foot long, not much curved. *Anther* with the anterior lip pressed inward, the apex mammillate.

Shan Hills, in Upper Burmah; in flower during November; Calcutta Botanic Garden Collectors.

A species of which the nearest ally is probably *B. suavissimum*, Rolfe. This however has two leaves, whereas the leaf in that is solitary. The flowers of this are moreover smaller than those of *B. suavissimum*.

*BULBOPHYLLUM VANESSA*, n. spec. *Rhizome* slender, wire-like; pseudo-bulbs ovoid-conic, closely approximate, 1 in. in length and .7 in. in diam. at the base. *Leaf* solitary, sessile, very coriaceous, narrowly elliptic-oblong, the apex acute and minutely bifid, the base much narrowed and convolute; length 8 to 10 in., breadth 1.5 in. *Scape* slender, erect, 10 to 12 in. long, with one or two tubular sheaths in the lower fourth, otherwise naked, 1-3-flowered. *Flowers* expanding singly, 3.25 in. across; floral bract membranous, lanceolate, acuminate, .25 in.

long, shorter than the sessile ovary. *Sepals* subequal, lanceolate, finely acuminate; the lateral pair slightly falcate, 1·5 in. long, widely spreading, many-nerved. *Petals* very small, broadly ovate, obtuse, only about ·12 in. long. *Lip* rather thin in texture, nearly as long as the sepals, lanceolate, acuminate, narrowed to the minutely auricled base; the upper surface with a central furrow in its basal half and a shallow lamina at each margin of the furrow. *Column* semi-terete, about three times as long as the petals; its foot slender, longer than and at right angles to itself. *Anther-lip* acute.

Perak; by the Batong Padang river; Mr. Ayre.

This belongs to a section of the large genus *Bulbophyllum* founded by Mr. H. N. Ridley, Director of the Botanic Garden, Singapore, under the name *Intervallatæ* (Journ. Linn. Soc. XXXI, 276) for the reception of a small group of species remarkable for possessing “a tall stiff scape ending in a many-flowered raceme, the flowers of which expand one by one at long intervals of time, the rachis slowly elongating as they expand, so that, though in one species as many as eighty flowers are eventually borne on the raceme, no two are open at one time, and many weeks elapse between the opening of the first and last flowers.” A similar method of flowering occurs in Blume’s genus *Dendrocolla*, also in the well-known *Oncidium Papilio*, Lindl., and in some other orchids. This species is intermediate between *B. tardiflorens*, Ridl. and *B. stella*, Ridl. (Journ. Linn. Soc. XXXI, 276, 277), but differs sufficiently from both to merit specific rank. A single specimen of it, accompanied by a pencil drawing numbered 434, was given to one of us by the late Father Scortechini many years ago, and as it appears to remain still undescribed, we now publish it.

The sepals of this are greenish-yellow with reddish markings, and the lip is of a dull carnation colour. The flower is a very striking one from its great size.

CIRRHOPE TALUM PROUDLOCKII, n. spec. Leafless at flowering-time. *Pseudo-bulbs* crowded, broadly ovoid, sometimes almost hemispheric, polished, ·5 in. long, and about as broad at the base. *Inflorescence* 1·75 in. long; the peduncle erect, filiform, naked; the raceme decurved, ·5 in. long, bearing 6 to 10 flowers each ·5 in. long and of a pale straw colour; floral bract lanceolate, much shorter than the slenderly stalked funnel-shaped ovary. *Dorsal sepal* lying parallel with the column, oblong; its apex sub-acute, and slightly reflexed; the lateral pair twice as long, oblong, blunt, lying close together under the lip, touching by their inner surfaces but not connate, their apices somewhat everted; edges of all entire. *Petals* as long as the column and much shorter than the dorsal sepal, triangular, entire, the apices aristate. *Lip* as long as

the dorsal sepal, oblong-elliptic, blunt, concave specially at the base, tumid. Teeth of the *column* erect, triangular, sharply pointed. *Anther* papillose at the summit; *pollinia* in two free pairs, the inner of each pair much reduced. *Stigma* transversely oblong.

Nilgiri Hills; at Ootacamund, Mr. R. L. Proudlock.

A species which might be placed either in *Bulbophyllum* or in *Cirrhopetalum*. Its nearest ally is probably *C. viridiflorum*. It has been collected only by Mr. R. L. Proudlock, late Curator of the Botanic Garden, Calcutta, now Superintendent of the Government Garden at Ootacamund, who kindly sent specimens; Pantling's drawing No. 615.

### EPIDENDREÆ.

*ERIA BRANDISII*, n. spec. Leafless at flowering-time. *Pseudo-bulbs* turbinate, slightly apiculate, smooth, shrunk when in flower, 4 in. in diam. *Scape* from the apex of the pseudo-bulb, erect, filiform, 2 to 3 in. long, with a loose scarious short sheath at the base, otherwise naked. *Raceme* about 75 in. long, with 6 to 8 flowers about 2 in. long; floral bract ovate, acute, scarious, longer than the thin pedicel of the ovary. *Sepals* sub-equal, erecto-patent, lanceolate, acute; the lateral pair sub-falcate. *Petals* shorter than the sepals, oblong, sub-falcate, tapered to the blunt apex. *Lip* lanceolate with a broad base and very short broad claw, without side lobes, the apex obtuse; upper surface with an oval callus near the base and with an obscurely thickened line proceeding from it to the apex. *Column* short, winged near the apex; the foot of about the same length, narrow. *Anther* broad; *pollinia* elliptic.

Burma; at Pym Kyoon, on an old tree; Sir D. Brandis; in flower during March.

Leaves of this are unknown. It belongs to the Griffithian genus *Bryobium*, which has justly been reduced to a section of *Eria* by Mr. Benthham and Sir Joseph Hooker.

Its nearest allies in the section are *E. Dalzellii*, Lindl., *E. nana*, A. Rich., and *E. muscicola*, Lindl., from which it differs in having larger flowers with which the leaves are contemporaneous.

*ERIA SHANENSIS*, n. spec. *Pseudo-bulbs* ovoid, 1 to 1.5 in. long. *Leaves* 2 or 3, membranous, narrowly oblong, absent at flowering time. *Racemes* one or two, from the axils of the undeveloped leaves, 2 in. long, few-flowered; the peduncle, short, naked. *Flowers* 35 in. long, white; floral bract broadly lanceolate, reflexed, about as long as the slenderly pedicelled pubescent ovary. *Dorsal sepal* linear-lanceolate; the lateral pair twice as broad, falcate, acute. *Petals* narrowly oblanceolate, sub-



acute, sub-falcate, all boldly nerved. *Lip* as long as the sepals, broad, sub-quadrate; the side lobes large, rounded; the end lobe small, triangular, acute, and with numerous small conical calli on its upper surface; the disc with two small oblong calli near the base and a central thickened line running from the base to the calli of the middle lobule of the apex. *Column* short, stout, the foot very short.

Shan Hills; Burma; collectors of Botanic Garden, Calcutta.

A species belonging to the Section *Hymeneria* and allied to *E. myristiformis*, Hook., which has however a different lip with distinct lateral lobes, two ridges on the disc, and ridges instead of conical calli on the terminal lobe. The pseudo-bulbs of this are moreover longer and the racemes shorter than those of *E. myristiciformis*.

*PHOLIDOTA WATTII*, n. spec. *Pseudo-bulbs* about 5 in. long, fusiform, much narrowed at the base, rising about an inch apart from a stout woody rhizome clothed with dark cinereous scarious sheaths. *Leaves* 2, narrowly elliptic, acuminate, much narrowed at the base to the short petioles; length about 6 inches, breadth 1.75 in. (probably often much larger). *Inflorescence* about 6 in. long; the peduncle sub-erect, 2 in. long, almost entirely clothed with stout imbricate unequal bracts; the raceme much decurved, 4 in. long. *Flowers* secund, distichous, somewhat crowded, .75 in. in diam.; floral bract broadly ovate, sub-acute, cymbiform, longer than the stalked ovary. *Sepals* somewhat unequal, all spreading; the dorsal broadly elliptic, blunt; the lateral pair narrower, subacute. *Petals* linear, acuminate, 1-nerved, spreading, about as long as the sepals. *Lip* 3-lobed; the lower part deeply saccate and with 3 shallow lamellae, its edges bearing the erect rounded narrow side-lobes, and with a small fold near their bases; apical lobe transversely oblong, entire, much recurved, its disc quite smooth. *Column* stout, slightly winged near the apex. *Anther* convex, with a truncate lip lying immediately on the upper margin of the dilated stigma, and bearing on the middle of its upper surface a small viscid mass which is attached to the attenuated apices of the 4 clavate pollinia.

The sepals and petals are straw-coloured with a dash of pale green. The side lobes of the lip are pale brown, the apical lobe being of the same tint as the petals. The column is also pale brown. The curious viscus borne on the edge of the lip of the anther serves to attach to each other the narrow ends of the clavate pollinia.

Assam; collected by Dr. George Watt, C.I.E., in whose honour we have named it.

A species allied to the Burmese *P. advena*, Reichb. fil., but differing from that species in having linear petals, and in the apical lobe of the lip being entire and ecarunculate.

## VANDEÆ.

*PHALÆNOPSIS MASTERSII*, n. spec. Roots abundant. *Leaves* oblong-obovate, the apices bluntly apiculate, the bases narrowed, length 1·25 in., breadth ·75 in. *Raceme* three times as long as the leaves, sparsely-flowered. *Flowers* about ·5 in. across; floral bract small, much shorter than the filiform stalked ovary. *Sepals* oblong; the dorsal with recurved margins; the lateral pair flat, sub-acute, strongly reflexed, their surfaces touching below. *Petals* falcately oblanceolate, much and irregularly undulate. *Lip* small, much shorter than the sepals or petals; the side lobes triangular, acute, erect, the disc between them bearing a fleshy 3-crested callus; the apical lobe oblong, blunt, much decurved, entire. *Column* with two erect conical teeth near its base. *Pollinia* sub-globular, the caudicle oblanceolate, the gland large.

At the Nambur Falls in Assam; Masters, February, 1845.

A species allied to *P. Esmeralda*, Reichb. fil., but a much smaller plant and with flowers one-half the size of those of that species. This is described from a specimen in the Calcutta Herbarium which has been hitherto overlooked. The species has not, so far as we are aware, been collected since Masters' visit to the Nambur Falls fifty-two years ago.

*BIERMANNIA*, new genus.

Epiphytal; stem very short. *Leaves* three or four, fleshy, linear. *Raceme* about as long as the leaves. *Sepals* sub-equal, ovate-lanceolate, the lateral pair attached to the base of the column. *Petals* shorter than the sepals. *Column* straight, with a short foot at right angles to itself. *Lip* attached at right angles to the foot of the column, as long as the petals, concave, fleshy, lobed or not; the disc with two or more calli; apex broad or sub-acute. *Stigma* large, orbicular. *Anther* depressed, apiculate, shortly beaked in front; *pollinia* 2, oval, attached by a subulate caudicle to a small gland. *Capsule* cylindric, ribbed, narrow. Two species, one in the Khasia Hills and the other in the Sikkim-Himalaya.

A genus allied to *Doritis*, but distinguished from it by the absence of forked appendages on the disc.

*BIERMANNIA QUINQUECALLOSA*, n. spec. A small plant with erect stem scarcely one inch in length. *Leaves* fleshy, narrowly oblong, the apex minutely bifid, somewhat narrowed to the base, length about 1 in., breadth ·25 in.; flowering-peduncle axillary, about as long as the leaves, bearing at the apex one or two flowers about ·3 in. across; floral bract minute, much shorter than the cylindric sub-sessile ovary. *Sepals* and *petals* sub-equal, oblong, sub-acute; the dorsal free from the lateral

pair at its base. *Lip* inserted on the short foot of the column, nearly as long as the sepals and petals, ovate when flattened out; the margins entire and involute, the apex blunt, erose; the upper surface with a large erect conical mealy callus near the base and, towards the apex, four smaller globular calli arranged in a transverse row. *Column* stout, bearing the stigma low down. *Anther* with a broad truncate lip; *pollinia* 2, globose, colourless, slightly cleft behind; *caudicle* dilated near the *pollinia*, the gland elliptical. *Capsule* 1.5 in. long.

Jaintia Hills; growing on a tree of *Pinus Khasiana* at Jowai, at an elevation of about 4000 feet; Pantling No. 631; in flower during July.

This species is allied to *B. bimaculata*, King and Pantling (in Ann. Botanical Garden ined.) but is a smaller plant and its lip has side-lobes. The flowers are white, the lip alone being yellow. They appear singly and last for only half a day.

*SACCOLABIUM COLLETTIANUM*, n. spec. *Stem* very stout, clothed in sheaths of fallen leaves. *Leaves* very coriaceous, flat with prominent midrib, narrowly oblong; bifid at the apex, the lobules blunt and unequal; the base not narrowed where jointed to the rather wide sheath; length 12 to 14 in.; breadth 1.25 to 1.4. *Panicle* slightly supra-axillary, rigid, shorter than the leaves; the branches few, spreading, few-flowered. *Flowers* .4 in. long; bract lanceolate, much shorter than the stalked ovary. *Sepals* broadly elliptic, blunt, spreading. *Petals* smaller, sub-acute, spreading. *Lip* two and a half times longer than the sepals and somewhat longer than the ovary, consisting chiefly of a long narrowly infundibuliform slightly curved spur without a septum, but slightly contracted in two places near the tip; the mouth of the lip wavy, side-lobes none; apical lobe a minute triangular protuberance from the mouth of the spur. *Column* short. *Anther* depressed, with a short truncate beak; *pollinia* 2, obliquely obovoid, bifid, diverging, attached by the cylindric caudicle to the large cuneately quadrate-cordate gland.

Shan Hills, in Upper Burma; Collectors of Calcutta Bot. Garden; in flower during July.

The flowers of this are rose-coloured, the tint towards the mouth of the spur being darker than elsewhere.

A species in habit much resembling *S. ochraceum*, Lindl., and *S. longifolium*, Hook. fil. (of the section *Acampe*). The flowers, however, are similar to those of *S. ampullaceum*, Lindl. (of Sir Joseph Hooker's section *Speciosae*) but have a lip with a minute terminal lobe, whereas the terminal lobe of the lip of *S. ampullaceum* is large.

*SACCOLABIUM COARCTATUM*, n. spec. *Stem* slender, pendulous, 2 to 4 in. long and .25 in. thick. *Leaves* pendulous, narrowly oblong, tapering

to the oblique but not bifid apex, narrowed to the base, sessile; length 6 to 8 in., breadth about 1 in. *Racemes* less than .5 in. long, short, extra-axillary, few-flowered. *Flowers* opening only one at a time, fugaceous, .5 in. long. *Sepals* narrowly elliptic, sub-acute. *Petals* shorter than the sepals, ob-lanceolate, acute. *Lip* rather shorter than the sepals, laterally compressed, sub-rhomboid when viewed from the side, chiefly consisting of a funnel-shaped blunt pouch, with straight upper edges, and a short horizontally-projecting bluntly-triangular, fleshy, smooth apical lobe. *Column* short, thick. *Anther* apical, horizontal, the lip trilobulate; *pollinia* 2, globose, the caudicle ligulate, the gland obovate.

Jaintia Hills at Amwee, elevation 3,000 feet; Pantling No. 625; flowering in June.

This species was collected by Mr. Pantling during the cold season of the present year. It flowered in cultivation in June. The flowers are white with purplish-brown markings on the column, and with small spots of the same tint on the sepals, petals, and lip. The apical lobe of the lip is of a bright yellow. This differs from all Indian species of the genus hitherto described by its curious pouched lip much compressed laterally. The flowers resemble those of the plant figured in the fifth volume of the *Annals of the Calcutta Bot. Garden* under the name *Sarcophilus brachyglottis*, Hook. fil. The lip of the present species has however no calli or septum inside it, and it is perfectly smooth; and the pollinia also are quite those of *Saccolabium*, being globose and not partite, and the column is without a foot.

*SACCOLABIUM CRASSILABRE*, n. spec. Pendulous; *stem* 2 or 3 in. long. *Leaves* coriaceous, flat, oblong; the apices sub-acute, entire, length 3.5 to 5 in., breadth about 1 in. *Inflorescence* from the stem below the leaves; the peduncle 1.5 to 2 in. long, slender, bearing a single short bract about the middle and, at the apex, 3 or 4 sub-umbellate flowers about .75 in. in diam.; floral bract ovate, acute, about one-fifth of the length of the stalked ovary. *Sepals* unequal, spreading; the dorsal elliptic, acute; the lateral pair larger, ovate-elliptic, acute. *Petals* slightly shorter and much narrower than the sepals, sub-spathulate, blunt, spreading. *Lip* attached to the sides of the column for its whole length, consisting of a deep wide pouched sac bearing two minute falcate side-lobes, the apical lobe reduced to a fleshy thickening of the apex of the sac, bearing a projecting callus inside near its base; the sac esepate, but with a few stiff glandular hairs near the bottom of its anterior wall. *Column* short, with a cluster of papillæ at its lower extremity extending into the sac of the lip. *Lip* of anther truncate; *rostellum* short, straight. *Pollinia* 2, colourless, deeply bipartite, attached in pairs to the small gland.



Khasia Hills; at an elevation of 3,000 feet; Pantling drawing No. 628; in flower during July.

The sepals and petals are of a dull yellow, the lip being white with irregular rose-coloured spots.

The characters of the flower in this plant are more those of *Saccolabium* than of any other Indian genus. The wide pouched lip, adhering to the column from its apex downwards, and expanding below its base into a wide esepate sac, is a character which brings this into alliance with the group of species in *Saccolabium* of which *S. calceolare* is the type. There is, however, in this no distinct apical lobe, but only a great thickening of the anterior extremity of the mouth of the wide sac of which the lip practically consists, and in this respect it differs from *S. calceolare* and its immediate allies.

*SARCANTHUS ROLFEANUS*, n. spec. *Stems* slender, pendulous. *Leaves* terete, 2 to 4 in. long, and about .12 in. thick. *Racemes* pendulous, 2.5 in. long, few-flowered. *Flowers* .33 in. across; floral bract minute, slender, subsessile. *Sepals* unequal; the dorsal ovate, concave, erect; the lateral pair oblong, very blunt, reflexed. *Petals* much narrower and somewhat shorter than the sepals, linear, blunt, reflexed. *Lip* about as long as the petals; side lobes large, oblong, blunt, entire; their apices oblique, subacute, directed forwards and slightly converging; apical lobe fleshy, triangular, its upper surface with a small antrorse tooth; spur short, horizontal, much shorter than the ovary, dorsally compressed, imperfectly septate, the posterior wall near the mouth with a broadly saggitate callus with a straight line of short stiff hairs in front of it. *Anther-lip* acute; *pollinia* 2, each completely bipartite, the caudicle broad; the gland triangular, orange-coloured.

Moulmein; Burmah; ? Peché.

This plant, which flowered in the Botanic Garden, Calcutta, last June is believed to have been received from Mr. Peché, Moulmein. The sepals and petals are of a dark purplish-brown, and the lip is white or pale pink. The species is allied to *S. appendiculatus*, Hook. fil., but is more slender, has smaller flowers, with a shorter spur, the structure of which differs greatly from that of *S. appendiculatus*. The latter species moreover has not the peculiar saggitate callus on the column which is so conspicuous in this.

*SARCANTHUS KUNSTLERI*, n. spec. *Stem* erect, rigid, often branching, 4 to 6 in. long. *Leaves* terete, fleshy, stout, horizontal or slightly decurved, 2.5 to 3 in. long, and about .25 in. in diam. *Inflorescence* more than twice as long as the leaves, spreading or erect; the peduncle with one sheath at the base and a few shorter scattered along its length; bearing above a raceme or panicle with thickened rachis. *Flowers*

numerous, not crowded, .25 in. across; floral bract ovate, acuminate, minute. *Sepals* subequal, elliptic, obtuse, reflexed. *Petals* smaller, oblong, blunt. *Lip* fleshy, its base with a short wide slightly curved sub-horizontal spur; the lateral lobes at the mouth of the spur erect, broadly oblong, subfalcate, obtuse; apical lobe ovate, acute, concave; the interior of the spur with an imperfect septum directed backwards from its front wall and a large callus from the back wall almost touching the former. *Column* stout, papillose, with a short thick foot and a small rounded callus on each side of the depressed anther; lip of *anther* truncate in front; *pollinia* subglobose, grooved.

Perak; Kunstler.

This species was sent some years ago from Perak by the late Mr. Kunstler, who collected there for the Calcutta Botanic Garden. It flowered recently, and is now described as new. Its nearest ally appears to be *S. Williamsoni*, Reichb. fil. The septum of the spur characteristic of this genus is in this species incomplete, as it extends only about half way across the cavity. At the same time it is prominent, being thick and solid. On the back wall, right opposite it, there is a faint ridge corresponding to it, so that a slight extension would make the septum complete.

*SARCANTHUS SAGITTATUS*, n. spec. *Stem* short, 1 to 2 in. long. *Leaves* two or three, linear-oblong, the apex blunt and obscurely bilobed, narrowed to the base; length 6 in., breadth .75 in. *Peduncle* as long as the leaves, slender, bearing at its apex a short raceme of about 12 rather distant flowers .25 in. in diam.; floral bract minute, much shorter than the slender cylindric stalked ovary. *Sepals* subequal, elliptic, blunt, the dorsal erect, the lateral pair reflexed. *Petals* shorter than the sepals, oblong, blunt, reflexed. *Lip* with large triangular acuminate forward-pointing side-lobes; the apical lobe saggitate, its point curving upwards; the spur longer than the sepals, narrowly infundibuliform, septate to near its bifid apex. *Column* stout, bearing near its base a large smooth 2-lobed callus with two curved divergent horns at its apex; the rostellum with two deflexed plates. *Anther-lip* truncate, ciliolate; *pollinia* oblong, attached at a right angle to the very broad tapering candicle, the gland ovate.

Khasia Hills, probably at Teria Ghat; Pantling, No. 629; flowering in June.

A very distinct species, with flowers somewhat resembling those of *S. Kunstleri*, K. & P., but with very different habit and leaves.

*STEREOCHILUS WATTII*, n. spec. *Roots* hairy. *Stem* very short. *Leaves* horizontal, linear-oblong, flat, fleshy, unequally and bluntly bifid at the apex, not contracted at the base; length 3 to 4 in., breadth

·5 to ·75 in. *Racemes* slender, glabrous, pendulous, bearing 4 to 9 flowers, ·8 in. in diam.; floral bract minute. *Sepals* oblong, blunt, the *petals* smaller and subfalcate, all reflexed on the slender stalked ovary. *Lip* adnate to the base of the column; the hypochile directed backwards almost parallel to the ovary forming an infundibuliform fleshy spur, its mouth with shallow side-lobes having acute apices directed forwards; the spur with a large 2-ribbed callus at its mouth just below the column septate at its extremity, sub-quadrate, its base produced into small auricles, its apex blunt but with a minute apiculus, its upper surface with a mesial triangular thickening. *Column* long; *rostellum* very long and pointed. *Anther* depressed; *pollinia* 4, plano-convex, attached by pairs to a very long thin caudicle bearing a small broadly ovate gland on the outer side.

Assam; on the Dikku river, elevation 1000 feet. Dr. G. Watt field No. 542.

The genus *Stereochilus* was founded by Lindley to receive a species from Khasia and Burma which he named *S. hirtus*. He considered the genus to be allied to *Camarotis*. Both these genera were reduced to *Sarcochilus*, R. Br., by Mr. Benthams (Gen. Plantar. III, 576). Sir Joseph Hooker, in treating the genus *Sarcochilus*, as Mr. Benthams understood it, (enlarged as it had been by the absorption, besides the two just mentioned, of the genera *Pteroceras*, *Micropera*, *Chiloschista*, *Fornicaria*, *Cylindrochilus* and *Cuculla*), remarks "a polymorphous genus no doubt to be dismembered when better known." Encouraged by this remark, we are led to re-establish *STEREOCHILUS*, relying as head-marks for the genus on the structure of the lip, on the very long beak of the rostellum, and on the length of the caudicle of the anticonous pollinia.

*CLEISOSTOMA TENUICAULE*, n. spec. *Stems* slender, pendulous, about 12 in. long. *Leaves* thickly coriaceous, somewhat twisted, borne about half an inch apart on the younger part of the stem, linear-oblong; their apices acute, not notched, slightly recurved. *Flowers* solitary, leaf-opposed, ·5 in. across, on a slender pedicel; floral bract very minute. *Sepals* and *petals* fleshy, subequal, spreading, oblong-oblongeolate, blunt; the lateral sepals slightly falcate. *Lip* fleshy, equalling or slightly exceeding the lateral sepals in length, narrowly oblong, tapering to the acute emarginate apex, deflexed from near the base, 5-lobed; the lowest pair of lobes near the base small and tooth-like, blunt; the pair at the base of the terminal lobe larger, conical, fleshy, pointing outwards; disc between the teeth sparsely pubescent; spur about one-third of the length of the stalked ovary and about as long as the sepals, horizontal, cylindric, tapering somewhat to the apex. *Column* short, bearing a linear callus on its anterior surface, curved upwards and hairy. *Anther* broad; *pollinia* 4 in 2 pairs, each pair globose and attached to a narrow caudicle with inflexed margins in its upper part; gland oblong, half as long as the caudicle, its upper end truncate.

Perak; collected by the late H. H. Kunstler. Pantling's drawing, No. 575.

A species allied to *C. bipunctatum*, Hook. fil. The sepals and petals are of a pale orange colour, with bold transverse blotches of purplish-brown, the lip is pale yellow. The species, originally sent from Perak by the late H. H. Kunstler, has flowered in the Botanic Garden, Calcutta, for several years in succession.

### NEOTTIEÆ.

POGONIA PARISHIANA, n. spec. Whole plant 2 to 4 in. high, leafless when flowering. Flowering *scapes* one and a half to three inches in height, each enveloped at its base by a lax wide-mouthed sheath .5 to 1 in. long, and bearing about its middle a smaller narrower one. *Flowers* 1 to 3, each about 1 in. in length and of a pink colour; floral bract linear, longer than the pedicelled tumid ovary. *Sepals* and *petals* subequal, linear-lanceolate, acuminate. *Lip* a little longer than the sepals, elongated-rhomboid in general outline, 3-lobed in its anterior half; side-lobes small, bluntly triangular, their apices directed outwards, the disc between them sparsely pubescent, convolute round the column, apical lobe not convolute, much larger than the lateral lobes, triangular with a very broad base and sub-acute apex, the edges minutely undulate and the upper surface densely hairy.

Upper Burma; at Fort Stedman; Abdul Khalil, Collector for the Botanic Garden, Calcutta.

The leaves of this are unknown. The flowers somewhat resemble those of *P. biflora*, Wight; but in that species the terminal lobe of the lip is quite glabrous and emarginate, whereas in this it is sub-acute and pubescent in the upper surface. This also resembles the species referred to by Sir Joseph Hooker in the Flora of Br. India (VI, 119) of which Mr. Parish gave a drawing (but no specimen) to the Kew Herbarium, under the name *P. cuprea*, Parish MSS.

POGONIA KHASIANA, n. spec. *Leaf* sub-rotund, 5-angled, green, about 1.75 in. in diam., cordate at the base, petiole 1 in. long. Flowering *scape* 3 in. high, with a single terminal flower, and two linear-oblong acuminate bracts, one at the base, the other at the middle. *Flower* .75 in. long; its bract ovate-lanceolate, acute, concave, shorter than the shortly stalked rather stout ovary. *Sepals* linear-oblong, acuminate. *Petals* of the same shape but smaller, all connivent. *Lip* somewhat shorter than the sepals, the basal portion clasping the column; the side-lobes triangular, their apices slightly up-turned, the apical lobe oblong-rhomboid, flat or slightly deflexed near the apex, its upper surface smooth and with a thickened line down the middle. *Column* slender, the apex dilated.



Jaintia Hills, near Jharain, south of Jawai, at an elevation of 3,000 feet; Pantling, No. 626, flowering in June.

A species near *P. macroglossa*, Hook. fil., but with smaller flowers and a lip with much larger side-lobes and a much broader apical lobe. The sepals and petals are of a pale olivaceous colour with brown stripes: the lip is greenish at the base, the side-lobes are white tinged with pink, and the apical lobe is white with bold rose-coloured spots.

*POGONIA FOLIOSA*, n. spec. Whole plant a span in height. *Leaves* 2 to 4, appearing with the flowers, elliptic-lanceolate, acuminate, many-nerved, unequal, clustered at the base of the short stem, their bases sheathed by a wide loose tubular acute sheath. *Scape* 6 or 7 in. long, rising from among the leaves, erect, smooth, slender, with a closely fitting bract 1 in. long at the base and another half as long about the middle. *Raceme* 3- or 4-flowered. *Flowers* .65 in. long; floral bract lanceolate, acute, shorter than the slenderly-stalked ovary. *Sepals* membranous, subequal, free, linear-lanceolate, acute. *Petals* slightly shorter, ob-lanceolate, acute. *Lip* about equal to the sepals in length, obovate in general outline, convolute round the column, 3-lobed at the apex; the side-lobes triangular, entire, their apices acute, directed forwards and equalling the apical lobe in length; apical lobe much broader, rounded, its edges undulate-erose; the disc with three glabrous lamellæ running from the base to near the apex, smooth in their lower two-thirds but pectinate in the upper third. *Column* slender, slightly dilated at the apex. *Anther* terminal, 2-celled, its lip 2-lobed; *pollinia* 2, coarsely granular.

Upper Burma; at Fort Stedman; Abdul Khalil, Native Collector of Bot. Garden, Calcutta.

A very distinct species of *Pogonia* belonging to the section of the genus which has the leaves contemporaneous with the flowers.

The few specimens known have leaves as described. But, with age, it is probable that the leaves become petiolate. The leaves and habit are those of a *Cephalanthera*, but the column is that of the genus to which we have referred it.

*CEPHALANTHERA CHARTACEA*, n. spec. Height of the entire plant 12 to 15 in. *Stem* short, stout, .3 in. thick at the base and enveloped by 2 unequal wide blunt foliaceous sheaths. *Leaves* 3 to 5, the sheath of the lowest leaf the largest and embracing those of the higher leaves. *Leaves* crowded, sessile, shortly sheathed, narrowly elliptic-oblong, acuminate, many-nerved, 4 to 9 in. long, and .35 to 1.15 in. broad. *Inflorescence* terminal; the peduncle longer than the leaves, naked, or with a single sheathing lanceolate bract 1 in. long close to the raceme, angled. *Raceme* short, few-flowered; floral bract ovate-

lanceolate, chartaceous, .75 in. long. *Sepals* subequal, lanceolate, acute, the petals rather narrower. *Lip* sessile on the base of the column, 3-lobed; the lateral lobes small, bluntly triangular; the apical lobe ovate, blunt; the disc with 5 vertical smooth parallel raised lines running from base to apex. *Column* short, stout, winged near the apex opposite the large concave stigma. *Anther* terminal, erect, 2-celled; *pollinia* 2, narrowly elongate, deeply bipartite.

Upper Burma, in the Southern Shan States, at Taungyi; Native Collector of Calcutta Botanic Garden.

Only two specimens of this are known, and the flowers of both are in bud. The description of the flower above given may therefore have to be modified in some of its details when fully developed flowers are collected. The clustered leaves form a pseudo-stem by their sheathing bases, an arrangement which gives this plant a very different *facies* from either of the two Indian species already described. The specific name has been given on account of the chartaceous nature of the floral bracts.

### GOODYEREÆ.

*ZEUXINE ANDAMANICA*, n. spec. Whole plant 12 to 18 inches high; stem stout in its lower half, rooting at the base. *Leaves* 4 to 10, scattered over the lower half of the stem, lanceolate, acute; the petiole very short and expanding into a short wide scarious sheath; length 1.25 to 2 in., breadth .6 to .8 in., petiole about .1 in. Peduncle of the *spike* slender, elongate, with sparse thin hairs, and bearing 3 or 4 distant scarious narrowly tubular bracts about .5 in. in length. *Spike* 3 to 6 in. long, many - but rather laxly-flowered. *Flowers* .2 or .25 in. long; floral bract sparsely puberulous, about as long as the puberulous ovary, broadly ovate, 1-nerved, its edges erose, with a long acuminate apex. *Dorsal sepal* broadly ovate-elliptic, concave, subacute; the lateral pair narrower, acute, not spreading. *Petals* narrower than the sepals, dimidiately elliptic, subacute, connivent with the dorsal sepal to form a hood covering the column. *Lip* longer than the sepals; the hypochile globularly saccate and having a prominent incurved tooth near the base within each margin; mesochile constricted; epichile deeply divided into two broadly-oblong diverging lobes with truncate minutely erose apices, the broad sinus with a minute point in its apex.

Andaman Islands; Calcutta Botanic Garden Collectors.

A species near *Z. moulmeinensis*, Hook. fil., but having a longer denser spike, smaller flowers, narrower non-aristate petals, a lip-sac without septa, and much shorter petioles.

*ZEUXINE ROLFIANA*, n. spec. Whole plant 15 to 18 in. high; stem sheathed at the base, 2 to 3 in. long. *Leaves* 3 or 4, alternate, close

together in the upper part of the stem, lanceolate to ovate-lanceolate, acute or subacute, the bases rounded, petiole .5 to .65 in. long, expanding into a short broad lax sheath at the base; length 1.75 to 3 in., breadth .7 to 1.2 in. *Peduncle* three times as long as the stem, slender, bearing 3 or 4 distant lanceolate bracts; *spike* 2 to 3 in. long, the flowers numerous, after expansion rather distant, .2 in. across; floral bract lanceolate, acuminate, as long as the pubescent ovary. *Sepals* subequal, broadly triangular, acute. *Petals* as long as the sepals, broadly triangular, falcate, acute. *Lip* longer than the sepals and petals cymbiformly saccate in its lower half, the sac containing on each side three retroflexed short cylindric pointed processes; the anterior part with two horizontally divergent oblong lobes with truncate erose apices; the upper surface smooth in the living state. *Column* short, broad, the apex acuminate; its front with two vertical plates nearly touching by their margins, and a second and smaller pair situated obliquely at their bases. *Stigmas* 2, elliptic and somewhat oblique.

S. Andaman; at Dhani Kheri: G. King.

A species near *Z. moulmeinensis*, Hook. fil., but having smaller flowers, differently shaped sepals and petals, and three calli instead of a single callus on the interior of the lip on each side. In the living state the lip is glabrous; but when dry it has the appearance of being puberulous, from the contraction of some of the epidermal cells.

## OPHRYDEÆ.

ORCHIS SUB-ROTUNDA, n. spec. Height of entire plant 7 to 9 in.; tuber oblong, entire, hairy. *Leaf* radical, solitary, sub-coriaceous, elliptic-ovate to sub-rotund, blunt or subacute; the base rounded, not narrowed but abruptly joining the short scarious tubular sheath; length 4 in., breadth 3 to 4 in. *Peduncle* 3 to 4.5 in. long, smooth, bearing at distant intervals 2 or 3 linear-lanceolate acuminate bracts .5 to .75 in. long. *Raceme* 3 to 4 in. long, bearing many but not crowded purple flowers each measuring about .5 in. across; floral bract ovate-lanceolate, acuminate, as long as the straight smooth ovary. *Dorsal sepal* broadly ovate, conniving with the petals to form a hood over the column, all ciliate; lateral pair inserted partly on the spur, broadly-elliptic, falcate, subacute, reflexed. *Petals* elliptic with broad bases, subfalcate, subacute, nearly as long as the dorsal sepal. *Lip* orbicular, a little longer than the sepals, slightly narrowed at the base, the margins undulate, the upper surface densely and shortly hispid especially towards the middle, the base with 2 very short parallel thickened smooth ridges just above its junction with the foot of the column; spur subcylindric, nearly straight, parallel with but less than half as long as the ovary, as long as the reflexed lateral

sepals. *Column* short. *Anther-cells* close together, parallel; *pollinia* elliptic, somewhat compressed; the caudicles twice as long as the pollinia, thick, tapering to the broad ovate fleshy glands; glands covered by membranous pouches; *staminodes* small, rugulose, attached to the outside of the anther-cells. *Stigmas* 2, conjoined to form a narrow transverse band across the column between the anther-cells and their pollinia, and separated from the cells by a large erect ovate subacute tongue-like lamella.

Upper Burma; at Fort Stedman; Abdul Khalil, Collector of the Botanic Garden, Calcutta.

The flowers are purple throughout.

An extremely interesting species; remarkable for the large erect process interposed between the base of the anther-cells and the conjoined stigmas. The long caudicles pass outside this process, and emerge below the stigmatic surface where their glands are partially covered by membranous flaps from the sides of the column. In *Habenaria secundiflora* there is a resemblance to the structure here described in the two erect processes which form flaps in front of the pollinar glands.

*HABENARIA MASSONIANA*, n. spec. Whole plant about a span in height. *Stem* slender, with two or three blunt lax wide sheaths at the base. *Leaves* 2 or 3, rising very near the base of the stem, narrowly oblong-ob lanceolate, acute or sub-acute, much narrowed to the sheathing base; length 2 to 4 inches, breadth .25 to .5 in.; stem above the leaves long, bearing at intervals 2 or 3 lanceolate acuminate bracts. *Raceme* 1.5 to 3 in. long, sparsely-flowered. *Flowers* .45 in. wide at the mouth; floral bract linear, acuminate, half as long as the slender shortly-stalked obscurely-beaked ovary. *Sepals* unequal; the dorsal broadly ovate or almost rotund, blunt; the lateral pair ovate-lanceolate, subacute. *Petals* linear, acute or subacute, about as long as the sepals. *Lip* longer than the sepals and petals, 3-partite almost to the base; the middle lobe linear, straight; the lateral lobes filiform, rather longer than the middle lobe, curved and diverging, also decurved; spur rather shorter than the ovary, slightly clavate towards the apex, very little curved. *Column* blunt. *Anther-cells* parallel, close together. *Stigmas* 2, oblong-pyriform, diverging, situated under the mouth of the spur.

Upper Burma; at Fort Stedman; Calcutta Bot. Garden Native Collector.

A species allied to *H. viridiflora*, R. Br., but that species has smaller flowers, differently shaped leaves, narrower petals and a longer more slender spur. It is also allied to *H. khasiana*, Hook. fil. (but is a larger plant with much broader leaves), and to *H. ditricha*, Hook. fil.; all members of the section *Trimeroglossa*. We have dedicated



this species to [the memory of the late Rev. Dr. Masson, for many years a Missionary in Burma, who wrote an excellent book on the economic condition, agriculture and natural products of that country. The colour of its flowers is unknown. As we have seen only dried specimens we are unable to give accurate details of the pollinia and their appendages, or of the staminodes.

*HABENARIA PRAZERI*, n. spec. Height of the whole plant about 20 to 24 inches, the stem rather slender. *Leaves* clustered towards the base of the stem, linear-lanceolate, acuminate, 3 to 5 in. long and .75 to 1.15 in. broad; peduncle of the inflorescence with 10 to 14 equidistant linear bracts .75 to 1.5 in. long. *Raceme* about 7 in. long, rather sparsely-flowered. *Flowers* .4 in. across; floral bract linear, finely acuminate, thin in texture, as long as or longer than the shortly-stalked obscurely beaked, ovary. *Sepals* unequal; the dorsal broadly ovate, blunt: the lateral pair slightly longer and narrower, acute. *Petals* smaller than the dorsal sepal, ovate-lanceolate, acute, very slightly falcate. *Lip* equalling the lateral sepals in length, its basal half transversely elliptic, slightly concave; its apical half fleshy, linear; the spur stout, half as long as the ovary, cylindric, incurved. *Anther-cells* placed close together, parallel, their tubes up-turned.

Upper Burma, Prazer.

This is known only by a single dried specimen from an examination of which it has been impossible to make out with certainty the form of the pollinia and their glands, of the staminodes or stigmas. No account of them is therefore ventured upon. As Upper Burma gets better known, specimens of this will no doubt be forth-coming; and it is believed, that by the preceding description, this plant may be identified. The species is clearly allied to *H. latilabris*, Hook. fil., and to *H. densa*, Wall., but it differs considerably from both in lip, spur, ovary, and in the clustered leaves. Like these species, it belongs to the section *Hologlossa*. It agrees with nothing in the Kew Herbarium.

*HABENARIA LINEARIS*, n. spec. Height of whole plant fifteen to twenty-seven inches. *Stem* slender, with several blunt tubular sheaths near the base. *Leaves* scattered along the whole stem from nearly the base, diminishing in size upward and passing into bracts towards the raceme, linear, acuminate, 2 to 4 in. long and .2 to .4 in. wide; the bracts smaller and somewhat lanceolate. *Raceme* 1.5 to 2 in. long, 3- to 6-flowered. *Flowers* white, about .75 in. across at the mouth; floral bract linear, finely acuminate, ciliolate, longer than the very slender, long-beaked sub-sessile ovary. *Sepals* sub-equal, lanceolate, the dorsal conduplicate; the lateral pair falcate, spreading. *Petals* somewhat shorter than the sepals, narrowly oblong, tapering slightly to the blunt apex.

*Lip* slightly exceeding the sepals in length, lanceolate, the base with<sup>n</sup> a slender claw, the apex blunt; the edges entire, decurved; the lower surface with a strong central keel from base to apex; spur clavate, incurved, slightly exceeding the ovary in length.

Upper Burma; at Saga; in the Southern Shan States; Collectors of Botanic Garden, Calcutta.

In habit this somewhat resembles *H. commiliniifolia*. Wall., but the structure of the flowers is wholly different. This belongs to Sir Joseph Hooker's section *Hologlossa*. It is known only from dried specimens, hence no attempt is made to describe the column and the organs situated on it.

*HABENARIA HAWKESIANA*, n. spec. Height of entire plant about nine inches; tubers small, ellipsoid. *Leaves* whorled at the base of the stem, two or three, ovate-elliptic or elliptic, acute, slightly narrowed to the short wide sheath; upper part of the stem bearing 3 to 5 lax lanceolate scarious nearly equal bracts about .75 to 1 in. long. *Raceme* 2- to 4-flowered. *Flowers* large, white, rather, distant, 1.5 in. wide at the mouth; floral bract linear, acuminate, as long as the sessile shortly-beaked ovary. *Sepals* unequal; the dorsal ovate, acuminate; the lateral pair rather longer. *Petals* lanceolate, slightly falcate, membranous and many-nerved like the sepals. *Lip* a little shorter than the lateral sepals, entire, triangular, blunt, puberulous; spur two or three times longer than the ovary, incurved. *Anther-cells* wide apart, their tubes rather long; *pollinia* with caudicles nearly twice as long as themselves, triquetrous in the upper half, curved, the glands small. *Stigmas* confluent, occupying the whole width of the column above the very wide mouth of the spur.

Upper Burma; Prazer.

Collected only once by Mr. Prazer who secured only a few specimens. He describes the flowers as white, with the exception of the lip which is saffron-yellow. The species has been named in honour of Colonel H. P. Hawkes, C. B., late Commissary General in Burma, an ardent horticulturalist, and an excellent authority on Indian and particularly on Burmese, artistic metal work. It appears to be allied to *H. plantaginea* Lindl., but this has an entire lip, while the lip of that and of the section (*Platyglossa*) to which it belongs is characterised by being 3-lobed.

*HABENARIA NEGLECTA*, n. spec. Entire plant 12 to 15 inches high. *Stem* clothed in its lower part by several unequal lax scarious sheaths. *Leaves* 3 to 6, scattered along the stem, unequal in size, those in the middle being the largest, narrowly oblong, acute, not narrowed to the sheathing base, length 1.25 to 3 in., breadth .25 to .6 in.; stem above

the leaves slender, bearing 2 or 3 distant linear acuminate bracts. *Spike* 2 or 3 in. long, sparsely-flowered. *Flowers* .25 in. across; floral bract lanceolate, acuminate, entire, slightly longer than the sessile beakless ovary. *Sepals* oblong-lanceolate, blunt, keeled. *Petals* as long as the sepals but narrower, blunt. *Lip* fleshy, not longer than the sepals, adnate to the base of the column by the narrow claw, divided down to the claw into 3 very narrow lobes; the side-lobes longer and narrower than the middle one, linear, sub-acute, very slightly curved and spreading almost horizontally; the middle-lobe narrowly oblong, blunt, very fleshy; spur longer than the sepals and nearly as long as the ovary, almost straight and very slightly clavate. *Peristylus*, No. 13 Herb. Ind. Or. Hook. fil. and Thomson.

“Malabar and the Concan. Stocks, Law and others” in Herb. Ind. Or. Hook. fil. and Thomson.

This differs from typical *Habenaria aristata*, Hook. fil. (figured by Wight under the name *Peristylus exilis*, Wight, Ic. No. 1698) in having the lateral lobes of the lip much shorter, the sepals and petals narrower and not all ovate, the spur longer and very slightly inflated towards the apex, and the floral bract longer than the ovary.

*HABENARIA MAINGAYI*, n. spec. Entire plant 4 to 6 in. high; roots thickly fibrous, some of them expanding into small oblong tubers. *Stem* bearing a short sheath near the base. *Leaves* 3 or 4, sessile, crowded near the base of the stem, oblong-lanceolate, acute, .5 to 1.75 in. long and .15 to .4 in. broad; *Peduncle* of spike bearing 4 or 5 distant lanceolate finely acuminate bracts. *Spike* 1 to 1.5 in. long, 6- to 12-flowered, rather lax. *Flowers* .15 in. across; floral bract oblong-lanceolate, acute, as long as the slender sessile ovary. *Sepals* subequal, oblong-lanceolate, subacute, the *petals* slightly narrower. *Lip* as long as the petals, adherent by a short claw to the base of the column, 3-lobed; the lateral lobes broadly oblong, blunt, diverging, broader than the blunt mid-lobe, the margins entire; upper surface with a single small triangular tooth at the bases of the side-lobes; spur much shorter than the sepals, obovoid-globose.

Singapore; Maingay, Herb. prop. 3354 (Kew distrib. No. 1663).

This species differs from *H. tentaculata*, Reichb. fil. (*H. lacertifera*, Benth.), to which it has been referred, in having much narrower and more numerous leaves, flowers twice as large, and a lip with broader lobes.

#### NOTE.

We take this opportunity of giving a description, drawn up from a living specimen, of *Dendrobium parviflorum*, Reichb. fil., a species originally published in 1845, by Griffith (under the name of *Aporum*

*Jenkinsii*) in the Calcutta Journal of Natural History, Vol. V, 367, t. 25. This species, owing to the reduction of the genus *Aporum* to *Dendrobium*, was named in manuscript *Dendrobium parviflorum* by Reichenbach filius, and under that name was published, without description, by Lindley in the Journal of the Linnean Society, Vol. III, (1859) p. 4; and this name was adopted by Sir Joseph Hooker in the Flora of British India, (Vol. V, 725). No specimen of this plant had been seen either by Lindley or Hooker, and none existed in the Calcutta Herbarium until last year when a living plant, collected by himself in Assam, was contributed by Mr. Giesslière. Mr. Giesslière's plant was described and was figured by Mr. Pantling, and the description is now published.

The specific name *Jenkinsii* to which, as a member of a genus reduced to *Dendrobium*, this plant has by the law of priority a secondary claim, was given in 1839 by Wallich to *D. Jenkinsii*, a plant now usually regarded as a form of *D. aggregatum*, Roxb.; and also by the late Dr. T. Anderson to a plant which turned out to be *D. cumulatum*, Wall.

DENDROBIUM PARVIFLORUM, Reichb. fil. MSS. ex Lindley in Journ. Linn. Soc. III, 4. *Stems* tufted, slightly flattened, 6 to 10 in. long and .2 in. broad. *Leaves* linear-lanceolate, acute or sub-acute, very fleshy, 1 to 1.75 in. long and .25 in. broad. *Flowers* white, single or in pairs from the apex of the stems, 1.25 in. long; floral bract minute, lanceolate, stalked ovary 1 in. long. *Dorsal sepal* ovate, oblong, blunt; the lateral pair much larger and broader; *mentum* large, elongate, curved. *Petals* about as long as the dorsal sepal, oblong, blunt. *Lip* oblong-elliptic with a slightly expanded apex, not lobed, slightly narrowed to the base; the apex broad, crisped, divided into two lobules by a minute triangular sinus; the upper surface quite smooth, white but with a yellow blotch near the apex. *Column* much shorter than its elongate much-curved 3-furrowed foot; *mentum* large, wide, curved in front. *Anther* with an entire truncate lip. Hook. fil. Fl. Br. Ind. V, 725. *Aporum Jenkinsii*, Griff. in Calc. Journ. Nat. Hist. V, 367, t. 25.

Assam; the exact locality unknown; collected once about 1845 by Griffith, and once in 1896 by Mr. Giesslière: flowered in the Calcutta Bot. Garden.

A species of the section *Aporum*, but with unusually large flowers allied to *D. terminale*, Par. and Reichb. fil.

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